AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Claim 1. (Original) A composite rare-earth anisotropic bonded magnet, comprising:

(A) Cobalt-less R1 d-HDDR coarse powder with an average grain diameter of 40-200 μm, comprising:

1. Cobalt-less R1 d-HDDR anisotropic magnet powder, obtained by performing a d-HDDR treatment on a cobalt-less R1 alloy of a rare-earth element including yttrium (Y) (hereafter, "R1"), iron (Fe), and boron (B) as the main ingredients and fundamentally not containing cobalt; and
2. #1 surfactant that coats at least one part of the grain surface of said cobalt-less R1 d-HDDR anisotropic magnet powder; and

(B) R2 fine magnet powder with an average aspect ratio of 2 or less and average grain diameter 1-10 μm, comprising:

1. R2 anisotropic magnet powder with a maximum energy product (BH)max 240 kJ/m^3 or more and with a rare-earth element including yttrium (hereafter, "R2") as one of the principle ingredients; and
2. #2 surfactant that coats at least one part of the grain surface of said R2 anisotropic magnet Powder and

(C) a resin as binder; wherein

the said bonded magnet contains 50-84 wt % of said Co-less R1 d-HDDR coarse magnet powder, 15-40 wt % of said R2 fine magnet powder, and 1-10 wt % of said resin; and wherein

relative density (ρ/ρ_{th}) of the said bonded magnet, which is the ratio of volume density (ρ) to theoretical density (ρ_{th}), is 91-99%; and wherein

normalized grain count of the said Co-less R1 d-HDDR coarse magnet powder in the said bonded magnet, where per unit area apparent grain diameter is 20 μm or less, is 1.2×10^9 pieces/m^2 or less;

the said composite rare-earth anisotropic bonded magnet having the special characteristics of outstanding magnetic properties and heat tolerance.

Claim 2. (Original) The composite rare-earth anisotropic bonded magnet recited in claim 1, wherein the above-mentioned R2 anisotropic magnet powder is SmFeN anisotropic magnet powder having samarium (Sm), iron (Fe), and nitrogen (N) as the main ingredients.

Claim 3. (Original) The composite rare-earth anisotropic bonded magnet recited in claim 1, wherein the above-mentioned R2 anisotropic magnet powder is Co-less R2 d-HDDR anisotropic magnet powder, obtained by performing a d-HDDR treatment on a Co-less R2 alloy having R2, Fe, and B as the main ingredients and fundamentally not containing cobalt.

Claim 4. (Original) The composite rare-earth anisotropic bonded magnet recited in claim 1 or claim 3, wherein when taking the whole as 100 at %, at least one of the above Co-less R1 d-HDDR anisotropic magnet powder or above R2 anisotropic magnet powder includes 0.05-5 at % of one or more of the rare-earth elements (hereafter, "R3") consisting of dysprosium (Dy), terbium (Tb), neodymium (Nd), and praseodymium (Pr).

Claim 5. (Original) The composite rare-earth anisotropic bonded magnet recited in claim 1 or claim 3, wherein when taking the whole as 100 at %, at least one of the above Co-less R1 d-HDDR anisotropic magnet powder or above R2 anisotropic magnet powder includes 0.01-1.5 at % of Lanthanum (La).

Claim 6. (Original) The rare-earth anisotropic bonded magnet recited in claim 1 or claim 3, wherein at least one of the above Co-less R1 d-HDDR anisotropic magnet powder or above Co-less R2 d-HDDR anisotropic magnet powder includes 0.001-6.0 at % of Co.

Claim 7. (Currently Amended) A composite rare-earth anisotropic bonded magnet compound comprising:

(A) Cobalt-less R1 d-HDDR coarse magnet powder having an average grain size of 40-200 μm, comprising:

1. Cobalt-less R1 d-HDDR anisotropic magnet powder, obtained by performing a d-HDDR treatment on a cobalt-less R1 alloy of a rare-earth element including yttrium (Y) (hereafter, "R1") ~~with R1~~, Fe, and B as the main ingredients and fundamentally not containing cobalt; and
2. ~~said~~ #1 surfactant that coats at least one part of the grain surface of said cobalt-less R1 d-HDDR anisotropic magnet powder; and

(B) R2 fine magnetic powder with an average aspect ratio of 2 or less and average grain diameter 1-10 μm, comprising:

1. R2 anisotropic magnet powder with a maximum energy product (BH)max of 240 ~~kJ/m3~~ kJ/m^3 or more and with ~~R2~~ a rare-earth element including yttrium (hereafter, "R2") as one of the main ingredients; and
2. #2 surfactant that coats at least one part of the grain surface of said R2 anisotropic magnet powder; and

(C) a resin as binder; wherein

the said compound contains 50-84 wt % of said Co-less R1 d-HDDR coarse magnet powder, 15-40 wt % of said R2 fine magnet powder, and 1-10 wt % of said resin; and

the said compound having a composition that direct contact between grains of the said Co-less R1 d-HDDR coarse magnet powder is avoided by enveloping the grains in said resin, said resin being a ferromagnetic buffer which said R2 fine magnet powder is uniformly dispersed ~~disperses in the said resin~~.

Claim 8. (Original) The composite rare-earth anisotropic bonded magnet compound recited in claim 7, wherein the above R2 anisotropic magnet powder is SmFeN anisotropic magnet powder having Sm, Fe, and N as the main ingredients.

Claim 9. (Original) The composite rare-earth anisotropic bonded magnet compound recited in claim 7, wherein the above R2 anisotropic magnet powder is Co-less R2 d-HDDR anisotropic magnet powder obtained by performing a d-HDDR treatment on a Co-less R2 alloy having R2, Fe, and B as the main ingredients and fundamentally not containing cobalt.

Claim 10. (Currently Amended) The composite rare-earth anisotropic bonded magnet compound recited in claim 7 or claim 9, wherein when taking the whole as 100 at %, at least one of the above Co-less R1 d-HDDR anisotropic magnet powder or above R2 anisotropic magnet powder includes 0.05-5 at % ~~of R3~~ of one or more of the rare-earth elements (hereafter, "R3") consisting of dysprosium (Dy), terbium (Tb), neodymium (Nd), and praseodymium (Pr).

Claim 11. (Original) The composite rare-earth anisotropic bonded magnet compound recited in claim 7 or claim 9, wherein when taking the whole as 100 at %, at least one of the

above Co-less R1 d-HDDR anisotropic magnet powder or above R2 anisotropic magnet powder includes 0.01-1 at % of La.

Claim 12. (Original) The composite rare-earth anisotropic bonded magnet compound recited in claim 7 or claim 9, wherein either the above Co-less R1 d-HDDR anisotropic magnet powder or above Co-less R2 d-HDDR anisotropic magnet powder includes 0.001-6.0 at % of Co.

Claim 13. (Canceled)

Claim 14. (Withdrawn) A production method for a composite rare-earth anisotropic bonded magnet, that production method comprising:

(1) A heat orientation process performed on a compound in which direct contact between grains of the said Co-less R1 d-HDDR coarse magnet powder is avoided by enveloping the grains in a ferromagnetic buffer made by uniformly dispersing the said R2 fine magnet powder in the said resin, the compound comprising:

(A) 50-84 wt % of Cobalt-less R1 d-HDDR coarse magnet powder having an average grain size of 40-200 μm, comprising:

1. Cobalt-less R1 d-HDDR anisotropic magnet powder, obtained by performing a d-HDDR treatment on a cobalt-less R1 alloy with R1, Fe, and B as the main ingredients and fundamentally not containing cobalt; and

2. said #1 surfactant that coats at least one part of the grain surface of said cobalt-less R1 d-HDDR anisotropic magnet powder; and

(B) 15-40 wt % of R2 fine magnetic powder with an average aspect ratio of 2 or less and average grain diameter 1-10 μm, comprising:

1. R2 anisotropic magnet powder with a maximum energy product (BH)max of 240 kJ/m^3 or more and with R2 as one of the main ingredients; and

2. #2 surfactant that coats at least one part of the grain surface of said R2 anisotropic magnet powder; and

(C) 1-10 wt % of resin as binder; wherein

in the said heat orientation process the compound is heated above the softening point of the resin which forms the said ferromagnetic buffer, and while keeping the said ferromagnetic buffer in a softened state or melted state, an orienting magnetic field is applied so that the said Co-less R1 d-HDDR coarse magnet powder and said R2 fine magnet powder are oriented in a specific direction; and

(2) a heat molding process in which, after said heat orientation process or in parallel with said heat orientation process, the compound is heated and press molded; wherein in the said production method:

normalized grain count of the said Co-less R1 d-HDDR coarse magnet powder in the said bonded magnet, where per unit area apparent grain diameter is 20 μm or less, is 1.2×10^9 pieces/m^2 or less; and

relative density (ρ/ρ_{th}) of the said bonded magnet, which is the ratio of volume density (ρ) to theoretical density (ρ_{th}), is 91-99%; and wherein

the said production method obtained a composite rare-earth anisotropic bonded magnet with excellent magnetic properties and heat resistance.

Claim 15. (Withdrawn) The production method for the composite rare-earth anisotropic bonded magnet recited in claim 14, wherein in the above mentioned heat orientation process, the green compact, which press molds the above-mentioned compound, is heated and the magnetic field of the green compact is oriented.

Claim 16. (Withdrawn) A production method for a composite rare-earth anisotropic bonded magnet compound, that production method comprising:

(1) A mixing process which combines and mixes:

(A) Cobalt-less R1 d-HDDR coarse magnet powder having an average grain size of 40-200 μm, comprising:

1. Cobalt-less R1 d-HDDR anisotropic magnet powder, obtained by performing a d-HDDR treatment on a cobalt-less R1 alloy with R1, Fe, and B as the main ingredients and fundamentally not containing cobalt; and

2. said #1 surfactant that coats at least one part of the grain surface of said cobalt-less R1 d-HDDR anisotropic magnet powder; and

(B) R2 fine magnetic powder with an average aspect ratio of 2 or less and average grain diameter 1-10 μm, comprising:

1. R2 anisotropic magnet powder with a maximum energy product (BH)max of 240 kJ/m^3 or more and with R2 as one of the main ingredients; and

2. #2 surfactant that coats at least one part of the grain surface of said R2 anisotropic magnet powder; and

(C) a resin as binder; wherein

the ingredients are mixed in a ratio of 50-84 wt % of said Co-less R1 d-HDDR coarse magnet powder, 15-40 wt % of said R2 fine magnet powder, and 1-10 wt % of said resin; and

(2) a heat kneading process in which after the said mixing process, the mixture is heated to a temperature above the softening point of the said resin, and then kneaded; wherein

the said production method obtained a compound in which direct contact between grains of the said Co-less R1 d-HDDR coarse magnet powder is avoided by enveloping the grains in a ferromagnetic buffer in which said R2 fine magnet powder is uniformly dispersed in the resin.

SUPPORT FOR THE AMENDMENTS

Claim 13 has been canceled.

Claims 7 and 10 have been amended.

The amendment of Claims 7 and 10 are supported by the corresponding Claims as originally filed and original Claims 1 and 4. These amendments serve to clarify grammatical errors and to ensure compliance with formal matters.

The amendment of Charts 3A and 3B are supported by the specification; see for example paragraphs [0133], [0177] and [0178]. The average grain diameter for D1 in chart 3A has been amended to correct a typographical error. Further, the charts have been amended to add a key for the symbols therein. Support for the same is found in the Examples of the present application.

No new matter has been added by the present amendment.